

Comparisons of Job Characteristics

Focus Occupation: [Geoscientists, Except Hydrologists and Geographers \(19-2042\)](#)

Associated Occupation: [Cartographers and Photogrammetrists \(17-1021\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 71

Focus Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)

Associated Occupation: Cartographers and Photogrammetrists (17-1021)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Geography	3.9	19.1	17.4	0	Current knowledge level may be sufficient
Computers and Electronics	8.4	14.8	15.0	0	Current knowledge level may be sufficient
Mathematics	9.2	9.9	16.0	>>	Current knowledge level is likely more than sufficient
Design	5.2	9.5	8.7	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 76

Focus Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)

Associated Occupation: Cartographers and Photogrammetrists (17-1021)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Reading Comprehension	10.7	12.8	16.0	>>	Skill level is likely more than sufficient
Writing	9.2	11.4	12.2	0	Current skill level may be sufficient
Time Management	8.9	10.0	10.6	0	Current skill level may be sufficient
Systems Analysis	6.5	8.6	8.6	0	Current skill level may be sufficient
Systems Evaluation	6.4	8.0	8.3	0	Current skill level may be sufficient
Mathematics	6.2	7.9	9.4	>	Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)

Associated Occupation: Cartographers and Photogrammetrists (17-1021)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Oral Comprehension	12.5	13.0	14.8	>	Current ability level is likely sufficient
Near Vision	11.1	12.8	12.8	0	Current ability level may be sufficient
Written Comprehension	11.0	12.3	16.0	>>	Current ability level is likely more than sufficient
Oral Expression	12.4	12.0	14.5	>	Current ability level is likely sufficient
Written Expression	9.8	12.0	14.2	>	Current ability level is likely sufficient
Inductive Reasoning	10.2	11.4	13.2	>	Current ability level is likely sufficient
Deductive Reasoning	10.6	11.0	13.0	>	Current ability level is likely sufficient
Information Ordering	9.9	10.7	11.4	0	Current ability level may be sufficient
Flexibility of Closure	7.8	10.1	10.1	0	Current ability level may be sufficient
Far Vision	7.8	9.3	9.4	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)

Associated Occupation: Cartographers and Photogrammetrists (17-1021)

Work Activities	Exclusivity of Activity
Analyze technical data, designs, or preliminary specifications	47
Collect geographic or physical data	81
Develop plans for programs or projects	31
Draw maps or charts	69
Draw prototypes, plans, or maps to scale	57
Interpret aerial photographs	69
Interpret maps for architecture, construction, or engineering project	77
Prepare technical reports or related documentation	22
Read maps	42
Read technical drawings	7
Understand engineering data or reports	48
Use computer aided drafting or design software for design, drafting, modeling, or other engineering tasks	58
Use drafting or mechanical drawing techniques	50
Use geographical information system (GIS) software	72
Use photogrammetric techniques	99
Use spreadsheet software	18

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 72

Focus Occupation: Geoscientists, Except Hydrologists and Geographers (19-2042)
Associated Occupation: Cartographers and Photogrammetrists (17-1021)

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Business function specific software	1
Cameras	2
Computer data input devices	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Drafting supplies	9
Geography and map skills resources and accessories	51
Industry specific software	1
Information exchange software	1
Land surveying instruments	19
Light and wave generating and measuring equipment	4
Measuring and layout tools	3
Network applications software	1
Radar and sonar systems and components	24
Utility and device driver software	17

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.